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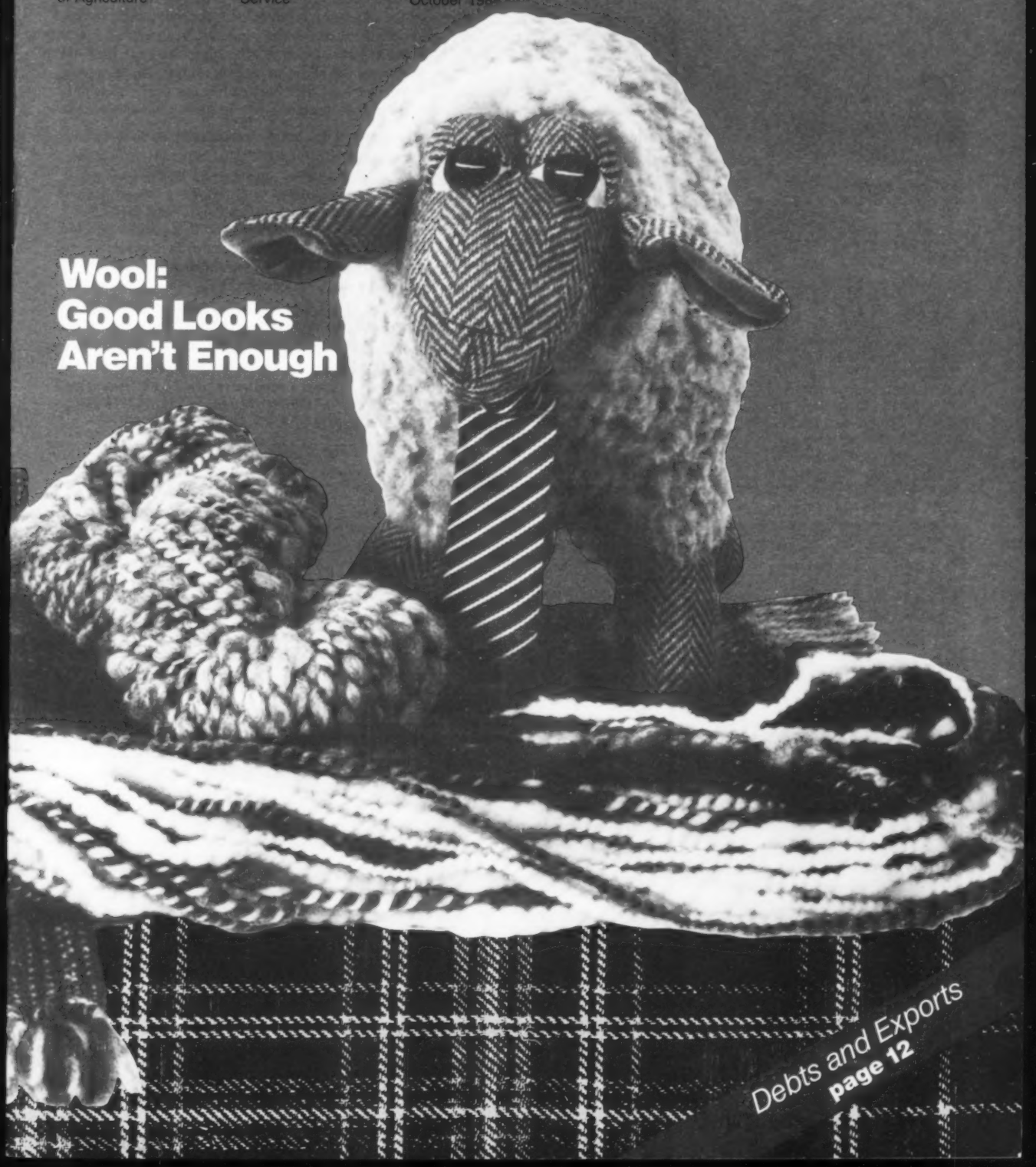

Wool: Good Looks Aren't Enough

Debts and Exports
page 12

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PERSPECTIVES

CASH RETURNS ARE MIXED FOR CROPS, IMPROVED FOR MOST LIVESTOCK, based on 1984 production cost forecasts from the Economic Research Service. Analysts compared 1983 figures with projected 1984 cash receipts, cash expenses, and pro-rated costs of replacing machinery and equipment used in the production process. The results indicate that corn growers will record higher net cash returns per bushel than they did in 1983, while wheat and soybean producers will show lower cash returns. Much of the livestock sector—other than dairy—carried a negative bottom line last year. These net cash losses haven't disappeared, but they're smaller this year.

In the crops area, farmers spent more per acre to produce major field crops this year, while harvest-period prices aren't expected to match last year's. However, with some exceptions, yields will be up sharply from drought-reduced 1983 levels. Thus, on a per-bushel basis, both cash receipts and expenses are generally down. Corn farmers, on average, may pocket 32 cents a bushel in net cash returns, up from 20 cents in 1983. Sorghum shows some improvement from 1983, although it's still in a net loss position after cash expenses and replacement costs. Net cash returns are positive, but down, for both wheat and soybeans. Wheat suffers from a drop in price and a slight drop in yield this year, while soybeans have registered a sharp decline in price.

In the livestock area, the average cash position for fed cattle, cow-calf, and farrow-to-finish hog operations is better this year, but all three continue to show net cash losses after cash expenses and replacement costs. If replacement costs are not figured in, both cow-calf and hog farms are on the positive side of the ledger—cow-calf operations for the first time since 1981. Dairy continues to show a positive return, but increased production costs and lower milk prices have cut the margin. For background on 1983's production costs and returns, see the article on page 9.

	Corn		Sorghum		Wheat		Soybeans	
	1983	1984	1983	1984	1983	1984	1983	1984
	dollars per bushel							
Cash receipts	$3.21	$2.75	$2.85	$2.55	$3.62	$3.46	$7.96	$6.00
Cash expenses	2.62	2.10	2.34	2.04	2.38	2.48	4.23	3.70
Cash expenses plus replacement costs	3.01	2.43	3.02	2.66	3.00	3.16	5.17	4.57
Cash receipts minus cash expenses	.60	.65	.51	.51	1.24	.99	3.73	2.30
Cash receipts minus cash expenses and replacement	.20	.32	-.17	-.11	.62	.31	2.79	1.43

	Fed cattle		Cow-Calf		Farrow-to-finish hogs		Dairy	
	1983	1984	1983	1984	1983	1984	1983	1984
	per cwt		*per cow*		*per cwt*		*per cwt of milk*	
Cash receipts	$62.12	$64.99	$247.18	$265.59	$46.92	$50.59	$14.68	$14.42
Cash expenses	67.58	66.87	260.15	261.60	47.26	44.79	10.54	10.77
Cash expenses plus replacement costs	68.79	68.15	325.53	330.89	53.45	51.35	12.12	12.47
Cash receipts minus cash expenses	-5.46	-1.88	-12.97	3.99	-.34	5.80	4.14	3.65
Cash receipts minus cash expenses and replacement	-6.67	-3.17	-78.35	-65.30	-6.53	-.76	2.56	1.95

Other news notes . . . Trading in options on six agricultural commodities is expected to be approved this month, with trading to begin soon thereafter. The six to be included in the first round of options contracts are: live cattle at the Chicago Mercantile Exchange, soybeans at the Chicago Board of Trade, hard red winter wheat at the Kansas City Board of Trade, hard spring wheat at the Minneapolis Grain Exchange, soft winter wheat at the Mid-America Exchange, and cotton at the New York Cotton Exchange . . . **Citrus canker** continues to threaten Florida citrus. The last serious outbreak there was in 1914 and took 13 years to eradicate, but experts are confident of a quicker solution this time.

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AGRICULTURE . . . NATURAL RESOURCES . . . RURAL DEVELOPMENT
Practical economic intelligence from USDA's Economic Research Service

FEATURES

For Wool, Good Looks Aren't Enough *by Ellen Banker* 4

In the world of fibers, wool is generally recognized as good looking, long lasting, and warm in winter, but these qualities aren't enough. The use of wool has plunged because of manmade fibers and consumer neglect of sheep meat. Import competition adds to U.S. wool growers' problems, but they are fighting back through blends and a "buy American" campaign.

Balancing 1983's Books: Who Came Out Ahead? *by Eric Van Chantfort* 9

Crop producers, as a group, fared much better than livestock producers in 1983. Returns after cash expenses were up for most crops, but most livestock sectors chalked up net losses—with the big exception of dairy. Here's a look at average cash expenses and net cash returns for six major crops and four livestock groups.

World Debt Stifles Trade, Heightens Tensions *by Doug Martinez* 12

Some of America's best customers are having trouble paying their debts—and that may slow any significant expansion in U.S. farm exports through the rest of the decade. Exports are already paying a price, and trade is not the only concern over a foreign debt that now totals more than $800 billion.

Catch-22 Food Crisis in Africa *by Maria Falcone* 16

Problems are widespread on the African continent. Millions of people are caught in a vicious circle of poverty, hunger, and lack of work, while some nations may be approaching economic or political collapse. Drought and famine are the immediate concerns, but food relief does not address the issue of chronic underdevelopment.

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For Wool, Good Looks Aren't Enough

In the world of fibers, wool is generally recognized as good looking and long lasting. You can always depend on wool clothing for warmth in winter. The problem for U.S. wool growers is that most Americans don't. Even when they do buy wool, as much as half of it comes from overseas.

The use of wool has declined dramatically since the turn of the century. Of course, the fiber is not alone. Declining use has been a common thread among all natural fibers, according to USDA economist Keith Collins of the Economic Research Service.

Together, wool and cotton accounted for virtually all of the fibers used in the early 1900's. By 1950, they accounted for 80 percent, but today's combined total is only around 30 percent, and most of that is cotton.

The wool statistics speak for themselves: Its share slid from 40 percent of total fiber use in 1900 to 10 percent in 1950 and only 2 percent last year. In raw numbers, U.S. wool production dropped from 249 million pounds in 1950 to 101 million in 1983.

The success of manmade fibers and the general consumer neglect of sheep meat share the blame. In terms of fibers, consumers have happily accepted nylon, polyester, and acrylic in place of, or in blends with, wool.

The reasons are performance and price. Although a pair of wool trousers won't wrinkle, it will lose its shape. It usually has to be dry cleaned and can shrink if cleaned improperly. Insect damage, particularly from moths, is a possibility if wool garments aren't protected. Manmade fibers offer drip-dry washing, no shrinkage, and no possibility of moth damage.

Manmade fibers have also been considerably cheaper. Prices for clean, fine, territory wool averaged about 3½ times more than those for polyester staple during the late 1970's. Rising prices for manmade fibers along with falling prices for wool have since narrowed the gap, Collins says, but producers aren't flocking into the sheep business. In fact, the nation's herd size has been cut by 80 percent since World War II as producers have faced increasing competition, eroding demand, and rising costs of production for both their wool and their meat products.

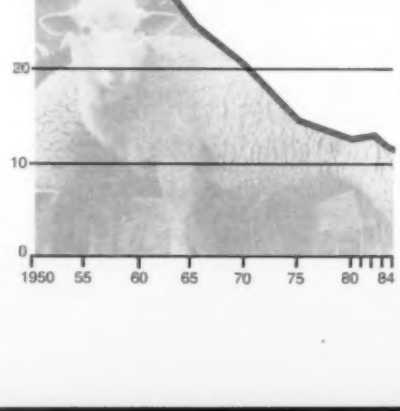
Steep Declines for Sheep

The deciding factor in the herd decline may have been the meat. After all, even with manmade fibers, consumers would be wearing more wool than they do if there were more sheep. The trouble is that mutton and lamb meat, which account for around 70 percent of the average producer's returns, have never really caught on as a significant part of the American diet.

If anything, our taste for these meats has dwindled. In 1930, lamb and mutton accounted for 6 of the 190 pounds of meat consumed per person in the United States. This figure dropped to 2.9 out of 200 pounds by 1970. And, last year, it was only 1.5 out of 210 pounds.

The production base reflects these trends: Sheep numbers dropped from the record 56 million head in 1942 to only 11.8 million last year. This year's herd count is down to 11.4 million, the lowest on record, with another 5-percent decline forecast for 1985.

The Decline in Sheep Numbers Has Slowed to a Crawl



Not surprisingly, last year's wool crop was the smallest since 1909, with a total production of only 100.3 million pounds. This year's output will probably be about the same.

The majority of production—about 75 percent—comes from the "territory" wool states, consisting of Texas, South Dakota, the Rocky Mountain states, and Pacific Coast states. Most other sheep are produced in Virginia, West Virginia, Pennsylvania, Michigan, New England, and the Great Plains. These are commonly referred to as the "fleece" wool states. Each region's name also describes the type of wool produced there.

In terms of grade, territory wool is finer, generally used to make better quality apparel. Fleece wool is a medium-grade fiber that's manufactured into coats, blankets, and sweaters.

Wool: A Regional Specialty

Just as the wool from each region differs, production characteristics and problems differ as well.

In the territory wool states, flocks are large, ranging from 150 to 400 head or more. Thirty years ago, it was common for a producer to have several thousand head of sheep out on the range. These operations have dwindled, but some still exist.

The western range presents a unique set of problems:

- Predators, mainly coyotes and wild dogs, are a major problem. Bears, mountain lions, foxes, and eagles add to the death loss. Some western producers lose 20 to 30 percent of their flocks every year, according to the American Sheep Producers Council.

- Hired labor is costly and hard to find. Sheepherding is a demanding job because of rugged living conditions and loneliness. Western herds are generally

Sheep numbers are now the lowest on record, and last year's wool crop was the smallest since 1909.

moved twice a year and need the constant presence of a shepherd.

• Weather has been a particularly serious problem this year. A late winter snow storm took a large toll on herds in Utah, South Dakota, Wyoming, Montana, and Idaho. In Wyoming, producers lost 22 percent of their breeding ewes. In some parts of Texas, the third straight year of drought has forced flock liquidations.

Competition for land tends to be greater in most fleece wool states, and average flock size is much smaller, less than 50 head. Sheep are usually only a small part of the farming operation. Also, producers don't ordinarily have access to organized marketing efforts like their larger western counterparts. They are more likely to market their products directly to consumers. Predators—more commonly wild dogs, but sometimes coyotes—pose similar problems in the East.

Why Not Wool?

Despite the differences, producers in both regions face a similar question. With so many lows, is there a future for domestic sheep and wool?

According to economist Collins, the answer is a definitive "yes." Although sheep numbers have continued to decline, the rate has slowed considerably since 1980, and much of the recent slippage is related to weather conditions—not further drops in demand. Domestic demand and U.S. mill use have both strengthened in 1983 and 1984.

But, he cautions, that "while the wool industry appears to have stabilized and some small improvement in fiber market shares is possible, it isn't likely to be significant."

For now, wool's best prospect appears to be in blends. Consumers can expect to see wool blends in many more textile products, especially in clothing, according to Anne Dolan, a spokeswoman for the American Sheep Producers Council in Denver.

Fashion is one of the major factors that affects the demand for wool. Others are relative fiber prices, price variability, and overall economic activity.

"Current fashion trends are promising," Dolan says. Starting in 1980, manufacturers began using slightly more wool in garments. "It was really in response to consumers," she explains. Consumers were buying fewer but higher quality items. "Slightly higher levels of wool in textile blends give the fabric the long-wearing quality manufacturers were after," Dolan says.

Price and Import Competition

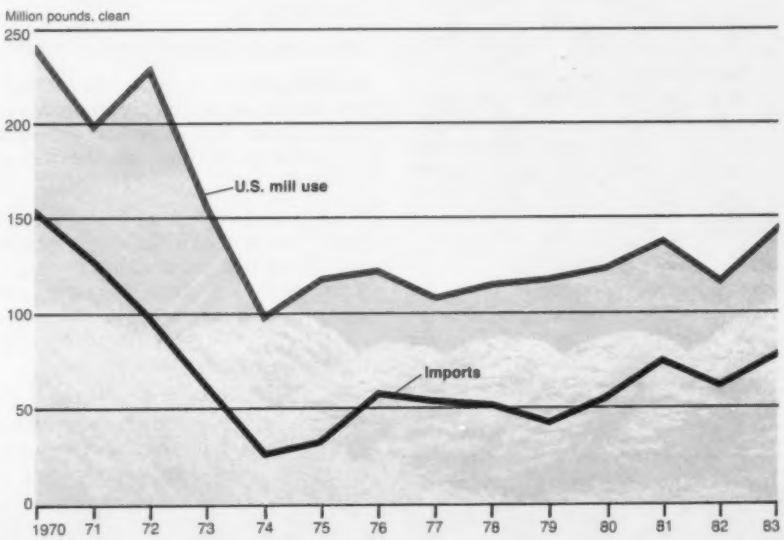
Wool may wear well, but manmade fibers still have the edge in price, and wool imports still provide stiff competition.

Prices for wool are sensitive to the forces that affect sheep numbers: demand and prices for lamb and mutton; biological time lags in production; and twice-a-year shearings. In addition, half the wool used in U.S. mills is imported, so changes in foreign production and demand can also cause substantial swings in U.S. prices.

In contrast, manmade fiber production is constant and consistent. The quality of the product does not vary much, and foreign supply and demand fluctuations have very little effect on U.S. manmade fiber prices because almost all the manmade fibers used by U.S. mills are produced domestically.

"Many mills dislike price variability even more than they dislike high but stable prices," Collins says. However, he adds, today's mill demand is probably less sensitive to price than when manmade fibers were rapidly being adopted. Desirable blend levels have been

Last Year's Mill Use Was the Highest Since 1973, But Imports Take a Major Share



achieved, and there are simply fewer products for manmade fibers to penetrate.

As for overall demand, the use of wool and all fibers increases when the economy is growing. However, the same is true of imports.

Imported wool is divided into two classes: duty-free and dutiable. The coarser grades of wool are imported duty-free because very little domestic wool is produced in these grades. The finer grades are dutiable because they compete with domestically produced wool. Dutiable imports have been almost twice the quantity of duty-free imports, reflecting the increasing U.S. demand for higher quality apparel which represents finer wool grades.

Wool imports—mostly from Australia and New Zealand—have grown because the quality is high and prices are competitive with U.S. prices, even after duties are paid. The strength of the U.S. dollar has contributed to the surge in U.S. imports. Australia produces considerable amounts of merino wool, a specialty fiber used in expensive apparel.

Higher prices are anticipated for imported wool in the mid-to-late 1980's, according to Collins, because of an expected weakening of the American dollar and an improvement in the economies of the major wool-importing countries. This is good news for American producers who will probably receive higher prices as well, especially if demand holds up.

Made In America

Whatever the import price trend, the American Sheep Producers Council does not intend to allow imports to reap all the benefits of any pickup in demand. Education is a top priority for this industry group. Their current campaign—"Made in America from American Wool"—is an educational and promotional program designed to reach everyone in the marketing chain from grower to consumer.

There's definitely a "buy American" feeling in the country right now.

There's definitely a "buy American" feeling in the country right now, according to the council's Anne Dolan. "And we want to educate the public about American wool. Many people don't even realize that wool is produced in this country, and even many of those who do, don't realize ours is among the finest quality produced anywhere in the world."

At the retail level, product labels and hang-tags, printed with the industry's new slogan, will help identify home-grown products, including some that are making first-time appearances in the marketplace.

Through a joint effort with brand-name manufacturers, the council has developed several products that are manufactured here using domestic wool, including blankets, uniforms, and upholstery materials. Thirty years ago, these products were almost always made from wool, but in today's market it's a rarity.

What does all this mean to the producer?

It gives us an opportunity that we have not had before, according to producer Edgar Olson, who serves on the wool committee of the American Sheep Producers Council.

"With the commitments from several major mills and the advertising program run by the council, producers will get more exposure with consumers than we've had in decades," Olson says. "Now it's up to us to produce the best quality wool we possibly can." □

[*Based on information provided by economists Keith Collins and John Lawler of the National Economics Division, Economic Research Service.*]

From Sheep to Shawl

Instead of two or three farm enterprises, the Raineys have one—sheep. But, instead of one farm business, they have about eight. From lambs and wool to mail order looms and weekend spinning workshops, the Virginia couple has taken the sheep business into areas considered unconventional by most producers.

Jerry Rainey will be the first to tell you: "We're really out of the mainstream when it comes to managing and marketing our products."

Their success is significant today, says USDA economist Keith Collins, because many traditional operations are under so much pressure. "Profits are being squeezed by predators, labor costs, imports, and other problems," Collins says.

Don't get the idea that the Raineys have no farming problems of their own. But this couple's story may give you an idea of what's possible in a modern sheep operation when the owners devote considerable time, thought, and talent to making it work.

Rainey places primary importance on wool, something many other producers consider a byproduct. "Our aim is to produce the cleanest fleece anywhere," he says. "We sell our raw fleeces directly to hand spinners and weavers, and they want raw fleeces that are absolutely free of manure, hay, burrs, barn bedding, and dirt."

Why is the business directed at such a small and specialized group? That's mainly the doing of Rainey's wife and partner, Priscilla Blosser-Rainey. "I was spinning yarn way before we started raising sheep," she says, "and finding an acceptably clean raw fleece was next to impossible." Her solution was to produce the cleanest fleece herself. "It's simple," Jerry Rainey adds. "We found a need and decided to fill it."

Of course, there is always the question of what to do with the live animal. Rainey says this is where River Farm resembles operations of more conventional producers. The sale of animals for breeding and

slaughter is still where most of the farm income is generated.

However, the Raineys try to sell directly to retailers and other producers whenever possible. They did start a specialized "freezer business" where a consumer can purchase all the cuts from one slaughtered animal, but they found their farm was too far from a major urban area to make that business profitable.

When Rainey does use an auction for marketing, he usually opts for the electronic auction that's now catching on in Virginia. It's fast, convenient, and accessible through his personal computer.

The computer is also used for the farm's extensive financial record-keeping and to maintain accurate tallies of lamb and wool production from each ewe.

The Rainey's operation has come a long way from when they started 10 years ago with two purebred Corridale ewes that Priscilla Blosser-Rainey had inherited, along with River Farm's 168 acres. Now, at any given time, about 180 sheep graze contentedly on 32 acres of the farm's pasture.

This is a large operation for the East where average flock size is around 30, according to Collins. "But," he says, "it's small when compared with some Western ranches that have thousands of sheep out on the range."

The smaller eastern operations generally allow more specialized care for the sheep, and care is one thing the Raineys are big on. Attention during lambing keeps the fatality rate near zero. Supplemental feeding includes alfalfa hay, which is grown right on the farm, and grain purchased from other area farmers.

The Raineys really keep their sheep covered...in Australian sheepcovers, that is. These heavy-duty, woven plastic covers fit over the sheep's body while accommodating fleece growth. "The covers insulate and breathe but, most important, they help us produce very clean fleece," Rainey says.

One customer recently wrote: "The raw fleece I purchased from your farm looks like you raised the sheep in the house." Although sheep are certainly not raised in the house, they are nearby. Rainey maintains the flock in the fields and barn closest to the farmhouse. His reasons are convenience and concern about predators. Wild dogs and coyotes have become a serious problem for some area producers. Rainey says he avoids predator problems with proximity, electric fencing, and a few natural barriers, such as the river.

Last spring, the Raineys averaged two lambs per ewe, mostly with twins and several sets of triplets to offset the single births. Management is tight, with lambing planned for twice a year, and about half the ewes bred each time.

"We are really interested in breeding for rich and subtly colored fleeces," Priscilla Blosser-Rainey says. American breeds are primarily white, but a few of the sheep will grow a brown or black fleece because of a recessed gene. "Those are the animals we try to breed. The result is a variety of lovely grey, brown, and black shades," she says. River Farm's stock now includes Corridales, Cheviots, Scottish Blackface, and a Rambouillet Suffolk cross.

In addition to selling raw fleece, spun wool, lambs, and ewes, the Raineys offer workshops in spinning, private weaving lessons, and seminars on flock management. They also have a stock of looms, carders, spinning wheels, and other equipment, including the sheep covers, for sale at the farm.

How do they keep track of and market such a wide variety of products? "With national advertising and a lot of help from the computer," Rainey says.

Australian sheep covers keep the fleece clean while it's still growing. Priscilla Blosser-Rainey restrains River Farm ewe, Henrietta, who's modeling a sheep cover.

Insulated from Foreign Competition

Japan and Western Europe are far more protective of their domestic agricultural markets than is the United States, according to a recent Japanese study.

The study, which contrasted "nominal rates of protection" in Japan, the United States, and Western European nations, was prepared by economists Yujiro Hayami and Masayoshi Honma of Tokyo Metropolitan University. Results were released late last year by the Forum for Policy Innovation, a Japanese think tank.

Economist Edward C. Wilson of USDA's Economic Research Service reviewed the English language summary of the study. Although he cautions that the summary did not provide the data necessary for independent verification of the conclusions, he notes that the findings are generally consistent with USDA views.

Europe and Japan use import barriers to stabilize their producers' prices and incomes by limiting foreign competition, Wilson explains. Without these barriers, farm income levels—which are maintained by their price support programs—could fall because of competition from lower priced imports.

The Japanese report measured relative degrees of protectionism by calculating the percentage by which world prices fell below domestic market prices in each country. After adjusting for transportation and other import costs, the authors assumed that the remaining difference resulted largely from protectionist practices that insulated domestic prices from lower world market prices.

In 1980, the most recent year covered by the study, Switzerland rated highest on the protectionism scale, with more than a 50 percent difference between its domestic price and world market prices for major grain and livestock products. Japan—far more important in world trade—weighed in at a close second, followed by Sweden, Italy, and West Germany.

Of the 10 countries covered in the study, the American prices differed least from world market levels. In fact, the report shows that 1980 U.S. agricultural prices were about even with world market levels for the commodities analyzed.

According to the study, increasing Japanese levels of protection date back to a period from 1955 to 1965 when the government raised support payments to close the income gap between rural and urban populations and keep people on the farm.

Who's More Protectionist?

Percentage difference between domestic prices and world prices:

¹Weighted average of Denmark, France, West Germany, Italy, Netherlands, and United Kingdom. ²U.S. figure is −0.1%.

Gleaning

Trimming wholesaler ranks. . . Meat wholesalers are seeing much of their business slip away in cardboard containers carrying vacuum-wrapped beef cuts direct from packer to retail firm. "Boxed beef, rather than carcasses, now makes up a majority of packer beef sales," says ERS economist Lawrence Duewer. "Consequently, there's not as much work for wholesalers who cut carcasses into primal or smaller cuts for the retail market." Some beef wholesalers have gone out of business. Others facing that threat are being forced to serve only specialty markets or to become more efficient by diversifying operations to handle other meat items such as pork.

Imported Exotica

America's agricultural imports, valued at about $16.6 billion last year, are top heavy with such essentials as coffee, tea, rubber, bananas, and coconut oil. Stowed away among the familiar items, however, are several others that may not qualify as household words.

Take, for example, coir. The United States imported nearly 8,000 metric tons of coir valued at $1.6 million in 1983. What is it? A stiff coarse fiber from the husk of the coconut, coir is used for making rope, mats and matting, and upholstery filling. Our supplier is India, where the coconuts are harvested about 30 days before maturity. The husks are soaked in water for over a week to rot away the soft tissues between the fibers, which are then cleaned and dried.

Mangelwurzer seeds—11 metric tons of them valued at $25,000—were imported last year. The seeds grow into mangelwurzers, large yellow to reddish-orange beets which appear partly above ground and partly below. In the United States, the beets are used primarily as forage for cattle.

Some perfumes, tobacco, and artificial vanilla extracts have a surprising common denominator—tonka beans.

Tonka beans contain something called coumarin which has a pleasant aroma and taste and is used as a scenting and flavoring agent. Tonka bean imports amounted to more than a hill of beans in 1983—43 metric tons valued at $329,000.

What animal is the largest rodent in existence, reaches 4 feet in length, has coarse fur, no tail, and is largely aquatic? The capybara, or carpincho, is a South American rodent which is related to the guinea pig. Two metric tons of carpincho skins were imported into the United States in 1983, their primary use being for glove leather.

What about gjetost? Some say it resembles mysost. In 1983, the U.S. imported 7 metric tons of gjetost, a brown Norwegian whey cheese with the consistency of butter and having a mild sweetish taste.

The U.S. also imports such items as cassava flour and stramonium. The toasted granules of cassava four are the more familiar tapioca, while the dried leaves of the thorn apple, or stramonium, are used for medicinal purposes.

Balancing 1983's Books: Who Came Out Ahead?

In the following article, economist Robert McElroy offers a brief summary of USDA's latest costs of production report, issued by the Economic Research Service. The report provides detailed 1981-83 data on U.S. farm expenses and returns for major crops and livestock. Estimated costs of production for 1984 were released after this article was prepared and are presented in the "Perspectives" column on page 2.

Crop producers, as a group, fared much better than livestock producers in 1983. The summer drought and the PIK program boosted crop prices, increasing the earnings of many crop farmers even though yields dropped sharply from 1982 levels.

While overall farm prices for crops rose 6.6 percent, prices fell 2.1 percent for livestock. Livestock producers also had to pay more for feed grains and other inputs. As a result, all major types of livestock enterprises showed lower returns in 1983 than they did in 1982—and most sectors, except dairy, chalked up net losses on each pound of product sold.

Corn: Yields dropped an average of 30 percent in 1983, and farmers harvested their smallest crop since 1970. Because of higher corn prices, receipts per planted acre were up 5 percent, while cash expenses per acre were down slightly. On a per-bushel basis, however, expenses were much higher than in 1982, reflecting last year's drought-reduced yields. On average, U.S. corn farmers came away with about 20 cents per bushel after deducting cash expenses and an allowance for replacing machinery and equipment used in the production process. In 1982, by contrast, they barely broke even. Per-bushel 1983 cash returns were positive in all major production regions, except the Southeast.

Sorghum: Average yield dropped 21 percent and production declined 42 percent, but a 36-percent harvesttime price increase boosted receipts $9 per acre from 1982. Cash expenses were up

Production Expenses Per Bushel Were Up for Most Crops in 1983, But Net Cash Returns Improved

Production costs and net returns by crop	1981	1982	1983
Corn (dollars per bushel):			
Cash expenses	1.86	1.87	2.62
Cash expenses plus replacement costs	2.12	2.14	3.01
Cash receipts minus cash expenses	.52	.27	.60
Cash receipts minus cash expenses and replacement costs	.26	.00	.20
Sorghum (dollars per bushel):			
Cash expenses	1.68	1.85	2.34
Cash expenses plus replacement costs	2.11	2.35	3.02
Cash receipts minus cash expenses	.57	.26	.51
Cash receipts minus cash expenses and replacement costs	.14	-.25	-.17
Barley (dollars per bushel):			
Cash expenses	2.03	1.75	1.85
Cash expenses plus replacement costs	2.53	2.26	2.44
Cash receipts minus cash expenses	.49	.48	.58
Cash receipts minus cash expenses and replacement costs	-.02	-.03	-.01
Wheat (dollars per bushel):			
Cash expenses	2.76	2.63	2.38
Cash expenses plus replacement costs	3.37	3.28	3.00
Cash receipts minus cash expenses	1.02	.88	1.24
Cash receipts minus cash expenses and replacement costs	.41	.24	.62
Soybeans (dollars per bushel):			
Cash expenses	3.57	3.38	4.23
Cash expenses plus replacement costs	4.26	4.09	5.17
Cash receipts minus cash expenses	2.48	1.75	3.73
Cash receipts minus cash expenses and replacement costs	1.78	1.04	2.79
Cotton (cents per pound):			
Cash expenses	53.1	54.5	61.8
Cash expenses plus replacement costs	60.4	62.1	71.4
Cash receipts minus cash expenses	9.0	9.9	18.5
Cash receipts minus cash expenses and replacement costs	1.7	2.2	9.0

Cash expenses include shortrun out-of-pocket variable and fixed costs. *Cash expenses plus replacement costs* add in capital replacement expenses needed to replace machinery and equipment used up in the production process. *Cash receipts* consist of all current returns generated from producing the crop, excluding government price support payments. All figures are U.S. averages.

slightly on a per-acre basis, but expenses rose sharply on a per-bushel basis because fewer bushels were harvested per acre. Farmers easily recovered their out-of-pocket cash expenses, yet they lost an average of 17 cents a bushel when replacement costs are figured in with cash expenses. Net cash returns for 1982 showed a somewhat larger loss of 25 cents a bushel. Sorghum farmers in the Central Plains lost money on each bushel in 1983, but those in the Southwest and Southern Plains made money.

Barley: Yield declined 9 percent, but production was down only 3 million bushels from 1982's record harvest. Both receipts and expenses per acre dropped. On average, farmers lost about a penny a bushel after cash expenses and replacement costs, compared with a 3-cent loss per bushel in 1982. Net cash returns per bushel were positive in the Northeast, Northwest, and Southern Plains, but negative in the Southwest and Northern Plains.

Wheat: The 1983 drought had little impact on the wheat crop. Total cash receipts per acre were $134, up from $114 in 1982. Cash expenses rose about $2 on a per-acre basis, but fell on a per-bushel basis. Net returns after cash expenses and replacement costs averaged 62 cents per bushel, a significant improvement from 1982. An average acre of hard red winter wheat netted 79 cents a bushel. An acre of white wheat netted 98 cents a bushel on average; soft red winter wheat netted 45 cents; durum netted 19 cents, and hard red spring fell just short of breaking even after cash expenses and replacement costs.

Net returns after cash expenses and replacement costs averaged 62 cents a bushel for wheat.

Soybeans: Yields dropped 20 percent, and farmers harvested the smallest crop since 1976. Harvest-period prices were up 55 percent from 1982, pushing average receipts to $200 an acre, up 25 percent from 1982. Cash expenses per acre remained nearly the same, so the increase in receipts more than doubled net returns per acre. Returns per bushel, after expenses and replacement costs, also jumped dramatically—from $1.04 per bushel in 1982 to $2.79 in 1983. Net cash returns ranged from more than $3 per bushel in the Corn Belt and Northern Plains to about $2 in the Delta and only 30 cents per bushel in the Southeast.

Cotton: Average U.S. yield dropped 16 percent, and harvesttime prices rose 14 percent in 1983. Total cotton receipts per acre increased, while cash expenses declined. Returns after cash expenses and replacement costs more than tripled, from $12 per acre in 1982 to $42 in 1983. On a per-pound basis, cash expenses rose because of lower yields. Nevertheless, net cash returns quadrupled from 2.2 cents a pound to 9 cents a pound. All major production regions except the Southeast showed positive net cash returns.

Fed cattle: Cattle feeders have seen expenses outstrip earnings since 1980. In 1983, receipts dropped because of lower slaughter cattle prices, and expenses rose along with higher feed grain prices. After expenses and capital replacement costs, net cash returns slipped deeper into the red, with an average loss of $6.67 per cwt (100 pounds) of sales. Had energy costs and interest rates not leveled off, losses would have been higher. Farmer feedlots registered slightly lower losses per cwt than commercial feedlots in 1983—a reversal of the typical situation—because feed prices were rising rapidly and commercial feedlots are more dependent on purchased feed. For most of the year, farmer feeders were relying on feed they had grown and stored from the fall 1982 harvest.

Cow-calf: Lower prices for cull cows and all classes of feeder cattle, except steer calves, reduced 1983 receipts. For the second year in a row, cash expenses (excluding replacement) to produce an average U.S. beef cow and calf were greater than receipts from the sale of feeder cattle and culled breeding stock. Cash expenses topped cash receipts by $12.97 per brood cow. When capital replacement costs are added in, these negative cash returns came to more than $78 per cow. The South, with smaller average size operations than most other regions, showed the largest losses in net returns per cow. Cash expenses of producers with herds of fewer than 100 brood cows averaged $37 per cow higher than expenses of producers with larger herds. Cow-calf producers responded to the continuing economic stress by further reducing U.S. beef cow numbers.

Hogs, farrow-to-finish: Hog producers had one of their most profitable years on

Cattle feeders, on average, have seen expenses outstrip earnings since 1980.

Dairy Was a Big Exception as Other Livestock Sectors Recorded Negative Net Cash Returns in 1983

Production costs and net returns by type of livestock operation	1981	1982	1983
Fed cattle (dollars per cwt):			
Cash expenses	70.83	64.52	67.58
Cash expenses plus replacement costs	72.06	65.77	68.79
Cash receipts minus cash expenses	-7.42	-.90	-5.46
Cash receipts minus cash expenses and replacement costs	-8.65	-2.15	-6.67
Cow-calf (dollars per cow):			
Cash expenses	255.66	262.06	260.15
Cash expenses plus replacement costs	314.88	324.94	325.53
Cash receipts minus cash expenses	4.98	-6.57	-12.97
Cash receipts minus cash expenses and replacement costs	-54.24	-69.45	-78.35
Hogs, farrow-to-finish (dollars per cwt):			
Cash expenses	46.38	42.90	47.26
Cash expenses plus replacement costs	51.97	48.71	53.45
Cash receipts minus cash expenses	-2.51	11.57	-.34
Cash receipts minus cash expenses and replacement costs	-8.10	5.76	-6.53
Dairy (dollars per cwt of milk):			
Cash expenses	9.74	9.86	10.54
Cash expenses plus replacement costs	11.38	11.43	12.12
Cash receipts minus cash expenses	5.20	4.80	4.14
Cash receipts minus cash expenses and replacement costs	3.56	3.23	2.56

Cash expenses include shortrun out-of-pocket variable and fixed costs. *Cash expenses plus replacement costs* add in capital replacement expenses needed to replace machinery and equipment used during the production process. *Cash receipts* consist of all current returns generated from producing the livestock product. Figures are U.S. averages for all size operations.

record in 1982, but losses returned in 1983. Hog production increased by more than 6 percent last year. More pork, coupled with larger supplies of beef and poultry, caused hog prices to fall. Meanwhile, sharply higher corn prices boosted feed costs. Prices for slaughter hogs dropped about 15 percent, and operating costs went up about 15 percent. Receipts after cash expenses and replacement costs shifted from a positive $5.76 per cwt in 1982 to a net cash loss of $6.53 last year. Farrow-to-finish operations produce three-fourths of all slaughter hogs. Feeder pig and feeder pig finishing operations also experienced a drastic decline in earnings from 1982 to 1983.

Dairy: Despite some slippage in net returns, dairy remained a bright spot in the livestock products area. Fluid milk sales account for more than 90 percent of dairy revenues, with sales of cull cows, calves, and replacement stock making up the remainder. Cash expenses rose about 70 cents per cwt of milk produced, but receipts were still substantially above expenses. Returns after cash expenses and replacement costs averaged $2.56 per cwt of milk, down from more than $3 in each of the two previous years. Net cash returns varied considerably among production regions: $1.53 per cwt in the Appalachian region, $1.78 in the Corn Belt, $2.66 in the Northeast, $1.99 on the West Coast, $2.49 in the Southern Plains, and $3.38 in the upper Midwest. □

*[Based on **Economic Indicators of the Farm Sector: Costs of Production, 1983** compiled and analyzed by economists Bob McElroy, Ken Baum, and Jim Johnson of the Economic Research Service. For a copy of their 156-page report (mostly data tables), write to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Enclose a check or money order for $5.50. Ask for the report by title and stock number 001-019-72034-4. Telephone orders can be charged to Visa or MasterCard—dial (202) 783-3238.]*

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World Debt Stifles Trade, Heightens Tensions

Some of America's best customers are having trouble paying their debts—and that may slow any significant expansion in U.S. farm exports through the rest of the decade.

In fact, overall world trade is being adversely affected by the inability of many developing and newly industrialized nations to repay the hundreds of billions of dollars borrowed in the heady growth days of the 1970's.

The foreign debt at issue now totals more than $800 billion, and the question of its repayment continues to haunt the world's financial community. One country—Bolivia—simply suspended its debt payments this year, pending new talks with creditors. Other countries are negotiating aggressively and successfully for more time to pay off their obligations.

America's stake in the foreign debts of other nations has several different dimensions. More than a third of the Latin American debt of around $330 billion is owed to U.S. commercial banks. And beyond the risks that private U.S. lenders have assumed are broader concerns related to smoldering tensions between debtor and creditor nations and the potential for long-term economic stagnation and political instability in some debt-ridden countries.

Trade, of course, is another issue, and perhaps the key one from U.S. agriculture's perspective. Among the top U.S. farm export markets facing debt difficulties are Mexico, Brazil, and the Philippines. Excluding our industrialized country markets, the 18 major purchasers of U.S. farm products (each buying $200 million or more) hold about 60 percent of the total debt owed by all the world's developing nations.

Two Economic Research Service economists, Mathew Shane and David Stallings, have been studying the debt situation and analyzing its impact on trade. Their assessment is not encouraging. They conclude that both U.S. and international trade will be severely constrained by the debt problems of the developing countries for at least the next 5 years.

Collapse of the Growth Miracle

The effects of a complicated debt situation that had its origins in the 1970's are easy to see today, Shane maintains.

"During the last half of the previous decade, middle-income countries such as Mexico, Brazil, and Nigeria were the fastest growing markets for U.S. agricultural exports. The recession of 1981-83 brought this growth in sales to an abrupt halt, particularly in those countries that had accumulated large debts."

Oil importers borrowed to sustain economic development plans in the face of rising petroleum prices. Oil exporters, assuming oil prices would continue to increase, borrowed against anticipated future revenues to modernize and diversify their economies.

Easy credit contributed to the rapid economic growth of developing countries during the 1970's. Economies such as Brazil's and Mexico's grew at unprecedented rates of 8 percent a year or more during this time.

But the "Brazilian Miracle" collapsed in 1981, along with the growth of most of the other developing nations. Worsening the problem since 1981 has been the mix of high interest and unfavorable exchange rates for these countries. Shane says the situation now approaches the point where a serious challenge is being posed to the world's financial health.

"The potential for a prolonged period of sluggish world trade growth, or worse, is very great unless fundamental solutions are found and aggressive actions taken to overcome the debt problem by both the developing and developed nations," he says.

No Easy Solution in Sight

Certainly, the dimensions of the problem suggest that no single, simple solution is likely.

"The magnitude of the problem since 1981 has been of a different order than anything that has come before," Shane says. More than 40 percent of total debt—an amount exceeding $300 billion—was at risk in the 25 developing countries involved in debt renegotiations and debt rescheduling between 1981 and 1983.

"Debt grew at a rate of more than 20 percent a year from 1974 to 1981, exceeding the growth in world GNP and exports," says Shane.

He describes the outlook for some debt-impacted countries as so severe that lenders—including commercial banks, the U.S. government, and international funding agencies—may have to consider forgiving a portion of the outstanding loans. "Simply putting off debt service payments for these countries will not lead to a feasible payment scenario."

Involved in this admittedly "grim analysis are the Latin American countries of Bolivia, Chile, and Peru, as well as some low-income African and Asian countries. Freeing up more money for these countries by deferring interest and principal payments on debt may not be sufficient to solve their financial difficulties."

Shane says that debt problems could mean falling per capita incomes in the affected nations.

"Latin America will not return to the economic growth rates of the 1970's in this decade. Growth rates of less than 1 percent for Brazil and 3 percent or less for Colombia and Mexico probably will not exceed their population growth. This implies that per capita incomes will be falling in many of the strongest economies of Latin America. The implications for their weaker neighbors, such as Bolivia, Chile, and Peru, are even worse."

Because more of their debt is in variable-rate loans than that of other developing countries, Argentina, Brazil, and Mexico suffer every time interest rates rise. "When there is an increase in the world interest rate of 1 percent, it costs these countries an additional $1 billion."

He goes on to say that "despite the apparent financial solvency of countries such as Brazil, Colombia, and Mexico, the question remains whether growth rates which imply falling incomes over a 5-year period are politically sustainable. The stakes in the international debt problem are more than just economic. One must consider the possibility of political instability when there are long-term declines in per capita incomes and trade. And that's what the current debt situation seems to imply for much of the Third World."

Shane cites the cases of the Dominican Republic, Tunisia, and other countries, where violent protests have erupted over rising inflation and falling incomes brought on by government-imposed austerity programs. Riots left hundreds dead and injured, and threatened the collapse of some governments.

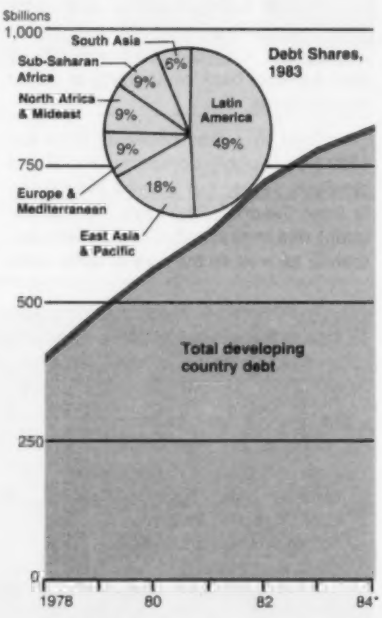
Global Equilibrium Disrupted

The current world crisis has grown from events that occurred more than a decade ago when oil exporters agreed to unite in order to lobby for better prices. The result was OPEC—the Organization of Petroleum Exporting Countries—and the price of oil quickly rose.

"Almost as quickly, the global economic equilibrium was upset by the quadrupling of oil prices," Shane says.

With oil revenues pumping up private bank reserves, lenders looked for ways that "petrodollars could be recirculated." Meanwhile, oil importers were looking for ways to pay the higher prices without sacrificing their economic development plans or suffering a deterioration in their already-low standards of living.

World Debt Continues To Climb, Though at a Somewhat Slower Rate



*Preliminary ERS estimate.

He explains that the "industrial countries accommodated the inflationary pressure of oil price rises with expansionary monetary and fiscal policies. Almost all prices for minerals, raw materials, and other natural resources went up substantially, and exports of developing countries expanded."

Most of the funds borrowed were used to finance productive investments that increased foreign exchange earnings by more than the amount of repayment. Brazil and Mexico were just two of the beneficiaries. In both nations, annual growth rates of 8 percent were common in the 1970's. "There were no previous periods of such growth," Shane notes.

The mix of factors at play produced what Shane describes as a "radical change in the global economic outlook that favored the resource countries. Prices of raw materials were so high that the profit on manufactured goods made by industrialized countries was hurt."

Then came the second round of oil price increases in 1979, shaking the world's stability again.

"The response of the resource countries, expecting the same reaction from the industrialized world, was to borrow even more," adds Shane's colleague, economist David Stallings.

The debtor nations were wrong.

Monetary Restraint

"The monetary restraint of the West produced a recession which led to declining trade," Stalling says, "pressuring the sensitive financial balance of the less-developed world."

In early 1981, he says, "the situation deteriorated rapidly." Debt service obligations (the total of principal and interest payments) for many countries began to rise faster than their ability to meet them. "In the most serious cases, the interest and principal payments due, or the interest payments alone, exceeded the amount these countries were earning from exports."

In the 1970's, interest rates on loans to developing countries were "negative"—that is, the rate at which their export prices were rising was higher than the interest rate on their loans. In essence, they were counting on continued inflation to pay back their loans in cheaper dollars.

"For the developing world, real interest rates were generally negative until 1981, when they turned sharply positive," Stallings says. "The decline in world trade led to falling export prices, at the same time that nominal interest rates were climbing."

Most hurt were nations that had contracted loans in dollars, he says. "In the United States, real interest rates rose as inflation abated. As a consequence, the value of the dollar also increased sharply. This abruptly reversed the circumstances for many borrowers, who contracted loans at what they thought to be low real interest rates. These loans had to be repaid with their depreciating local currency."

The dollar's real appreciation against the monies of the less-developed world "has been dramatic, substantially reversing the downward trend of the 1970's. Tremendous pressure now exists on the external financing of most affected countries. The dollar's real appreciation against currencies in East Asia and Latin America in 1983 also indicates the probable further decline in the U.S. share of their imports."

Depressed World Trade

World trade has already been hampered by the debt crisis, Stallings says.

The volume of world trade did rise 2 percent in 1983, but this improvement came after a 2.5-percent decline in 1982, following a meager 1-percent gain in 1981 and a 1.5-percent rise in 1980. Much of the burden fell on the developing world, where the total value of exports dropped each year from 1981 through 1983.

"Export earnings of the non-OPEC developing world showed the most astonishing change from the 1970's to 1981-83," Stallings says. "After increases averaging over 20 percent a year from 1977 to 1980, export revenues rose only 5.3 percent in 1981 and declined 4.7 percent in 1982. The recovery this year promises some increases, but not close to the export performance of the past decade."

Faced with falling exports and rising debt service requirements, developing countries confronted two tough choices—cut back on imports or obtain further loans.

"The rise in credit between 1981 and 1982 was roughly comparable to that in previous years, but proved insufficient to meet the crisis," he says. "The subsequent rise in reschedulings of debt payments, as well as the size of debt under negotiation, made many potential creditors wary of increased exposure. As a result, new loan offerings were relatively scarce in 1982, a circumstance that continued through 1983 and into the current year."

For debtor countries, then, balancing the books has meant trimming imports. In dollar terms, total imports of all less-developed nations fell 7.5 percent from 1981 to 1982 and another 6.3 percent in 1983.

"Worldwide, exports of U.S. farm products suffered sharp setbacks from 1981 to 1983, with the value off more than 10 percent," Stallings says.

Based on projections from a simulation study conducted by Shane and Stallings, U.S. agricultural exports might have been as much as $5 billion higher this year had developing countries faced no financial constraints. By 1987, the difference may exceed $7 billion under their worst-case scenario. "That represents a loss of about 20 percent of our potential export market, unless actions are taken to counteract the effect of debt on trade," Stallings notes.

Decline in Latin Trade

He points to Latin America as one major reason for the trade slowdown.

"In addition to accounting for most of the world's external debt problems, Latin America also provided the largest share of the decline in U.S. agricultural

Credit Becomes Far More Expensive for Developing Countries as Real Interest Rates on Loans Turn Positive

	1973	1975	1977	1979	1981	1983
	real interest rates[1]					
Latin America and Caribbean	-28.4	5.3	-16.0	-5.7	19.4	9.2
Sub-Saharan Africa	-30.1	3.1	-13.6	-18.3	18.6	16.8
East Asia and Pacific	-31.3	11.0	-3.8	-13.1	17.9	13.6
North Africa and Middle East	-20.0	0.6	-3.6	-15.9	12.9	16.2
South Asia	-20.3	5.9	-14.2	0.2	18.7	15.4
Europe and Mediterranean	-14.7	0.5	-6.8	-3.3	22.2	18.3

[1]Adjusted for changes in export prices.

At the Chicago Mercantile Exchange, shown here, and other international currency markets, the value of the dollar continues to rise. An appreciating dollar makes it more difficult for developing nations to repay their debts.

exports. The dollar value of U.S. farm products shipped to the region fell 31 percent in 1982 and almost 53 percent to Mexico alone. Last year's recovery in U.S. agricultural exports to Latin America was entirely due to increased sales to Mexico, even though that country's total commercial purchases were well below 1980 and 1981."

Elsewhere in the developing world, says Stallings, "the only area of optimism for U.S. exports lies in Asia, notably in South Korea. Despite the country's $40 billion foreign debt, strong exports will allow sustained growth in imports, including food and feedstuffs."

In fact, says fellow economist Shane, this Asian country sets an example that, at least in some respects, other developing nations might envy.

"South Korea is one of the world's major debtors, but nobody's worried about it having huge foreign debts because its exports are so large," he says. The export-oriented economy of South Korea has continued to stay robust into the 1980's, following on even more spectacular surges in the 1970's.

According to Scott Goddin, the U.S. Commerce Department's desk officer for South Korea, the country's economy has shown remarkable expansion for the last 10-years—except for 1980. That year it suffered a GNP drop of 5.2 percent in the wake of the second round of oil price rises and widespread political turmoil, including the assassination of its president.

Economist Shane says the Korean example provides a useful model for other developing countries, but one nation's experience cannot necessarily be translated to others.

Each country will likely have to rely on its own "unique policy instruments for turning things around. How these economies adjust now and begin to service their debt and grow again is a question that has to be answered differently in each case."

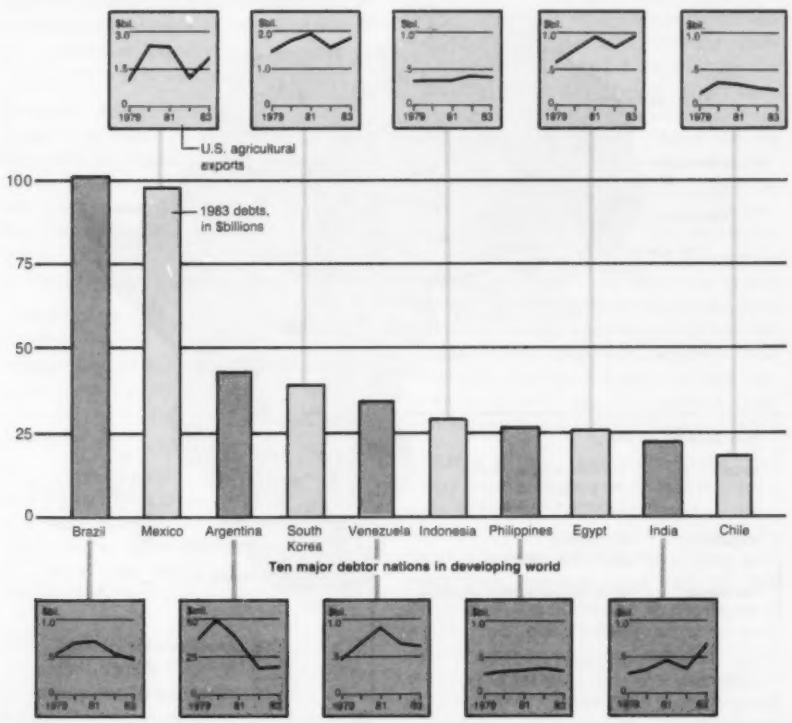
In the meantime, however, the debt problem looms as a major obstacle to progress. Shane suggests it will continue to devastate individual countries unless their "loans and interest rate structure are revamped in line with their ability to pay. Terms could be set on a country-by-country basis."

Elimination of variable-rate loans in some extreme cases and "capping current debt at lower, long-term interest rates, perhaps around 10 percent, would better allow debt-impacted nations to service their debt."

Certainly, this would entail some sacrifice by lenders, Shane concludes, but "the losses later could be even greater if Western nations don't take the lead now in coming up with solutions that will permit the debtor countries the opportunity to initiate sustained economic growth once again." □

[Based on information provided by economists Mathew Shane and David Stallings of the International Economics Division, Economic Research Service, with additional data provided by economists Jorge Hazera and Maria Elena Pomar.]

More Than Half the Major Debtors Have Cut Purchases of U.S. Farm Products Since 1981



Catch-22 Food Crisis in Africa

Low productivity farming...growing populations...stagnating economies...civil wars...huge debts...and continuing drought. Problems are widespread on the African continent, where some nations may be approaching economic or political collapse and millions of people are caught in a vicious cycle of poverty, hunger, and lack of work and income.

Food shortages are the immediate concern. The response has been a substantial increase in emergency food relief. Although this will save many from starvation, it does not address the issue of chronic underdevelopment.

The challenge, experts say, is to strengthen the fragile economic conditions which are the underlying cause of severe food shortages facing about two dozen countries in Sub-Saharan Africa, which includes all of the continent south of the Sahara desert. Without a long-term strategy for overall economic development, this region of Africa will continue to be confronted with severe food crises in the future.

"The Sub-Saharan countries are in a catch-22 situation," says USDA economist Arthur Dommen, a specialist on Africa with the Economic Research Service. "While there is an overwhelming need to develop the agricultural sector to generate economic growth, the agricultural sectors of these countries are starved for funds, labor and technology."

Going Backward

In the last two decades, Sub-Saharan Africa has been plagued by three major droughts, each lasting for several years. The recent one began in 1983 and continues unabated in some areas. More than two-thirds of the countries in the region, populated by up to 150 million people, have been affected. More than 100,000 have died in Mozambique, according to that government's estimates.

The 1983-84 drought highlights the long-standing problems in many Sub-Saharan countries. Population grew at an estimated rate of 2.8 percent a year from the early 1960's to the early 1980's. During the same period, food production increased at the rate of only 1.7 percent a year.

Sub-Saharan Africa has been the only region of the world where per capita food production declined in the last two decades. Post-harvest losses or adverse weather conditions have a much more disastrous effect on African populations than they would in other parts of the world, where per capita food production is increasing.

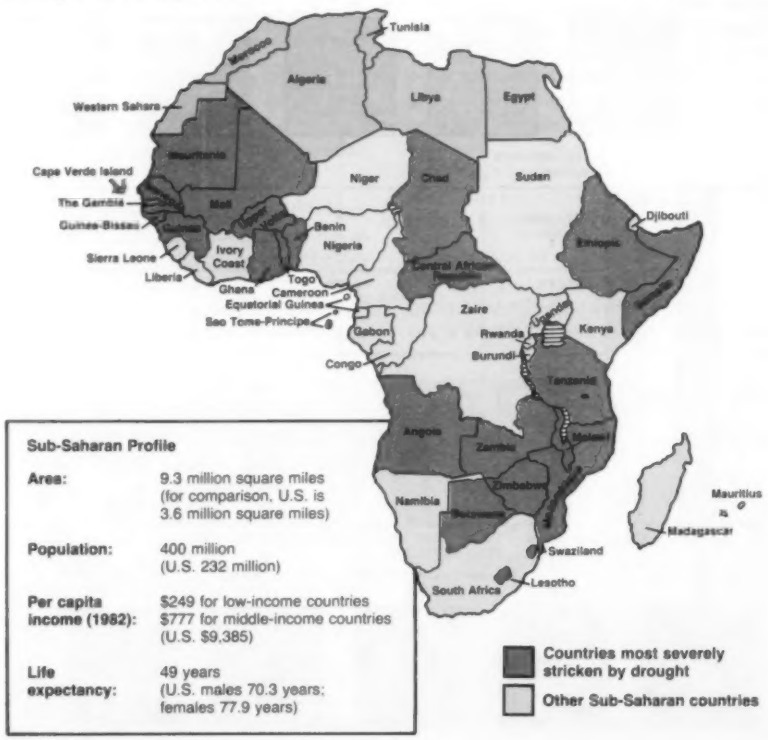
"Without the resources to boost productivity," says Dommen, "African farmers struggle to increase output by shortening fallow times and cultivating more marginally productive land. The results include soil degradation, less nutritious food, and still lower yields per acre."

Agricultural development is hampered by many internal constraints: the frequent droughts, the lowest share of irrigated land of any of the world's regions, primitive technology, poor transportation, and deficient or absent storage facilities, among others.

"Infrastructure is extremely limited in most countries," says Dommen. "Entire regions are cut off without roads, bridges, or rail transportation. Even in areas where there are roads, the rainy season renders them virtually impassable during the very time they are needed to transport inputs. It makes for a very tenuous situation."

Agricultural production has also suffered because of civil unrest and war in

Drought: The Final Straw



Sub-Saharan Profile

Area:	9.3 million square miles (for comparison, U.S. is 3.6 million square miles)
Population:	400 million (U.S. 232 million)
Per capita income (1982):	$249 for low-income countries $777 for middle-income countries (U.S. $9,385)
Life expectancy:	49 years (U.S. males 70.3 years; females 77.9 years)

Drought not only affects crop production but also drinking water supplies.

some countries, such as Ethiopia and Mozambique. Farmers have been displaced because of fighting, with transportation and marketing disrupted. Refugees fleeing conflict and famine compound the problems for countries already unable to feed their own people.

Recession and Drought

Added to the structural obstacles to progress have been events affecting Africa from outside. Two oil price shocks in the 1970's, the global economic slowdown of 1979-83, and declining world prices for Africa's principal exports created an environment hostile to economic growth. Even major industrial countries experienced declines in real income and per capita GNP.

However, poorer countries in Africa and elsewhere were hardest hit. Lacking domestic savings and outside income to cover their balance-of-payments deficits, they found it necessary to increase their borrowing abroad. They accepted heavy debt burdens at high interest rates to keep their economies going.

Instead of improving, the situation deteriorated. When debts became due, meager export earnings were needed to meet debt payments, leaving little to finance economic or agricultural development.

The latest drought was, perhaps, the final straw. It has been unusually severe, and some of the countries were just beginning to recover from the effects of two other major droughts in Africa since the late 1960's.

What Role Food Aid?

To help alleviate this immediate emergency, the African governments have become increasingly dependent on food aid—a dependency which may hinder efforts to find longer term solutions, says Dommen. From 1978 to 1983, the dollar value of U.S. food aid to Sub-Saharan Africa under P.L. 480 (the Food for Peace Program) increased by 59 percent. The program provided more than 450,000 metric tons of emergency food aid to needy countries of the region in fiscal 1984, nearly tripling the amount provided in the previous year. Aid was also provided by other nations and international organizations, but the United States accounted for the majority of the donations.

Many authorities studying the complexities of the Sub-Saharan food aid problem address the need to be mindful of a possible conflict between short-term and long-term objectives in responding to these emergencies. Julia Chang Bloch of the U.S. Agency for International Development (AID) made this point in testimony before the Senate Foreign Relations Committee on March 1, 1984: "We cannot stand by and ignore human suffering. Yet we must guard against governments using our support to put off the day when they will confront their structural problems squarely. The challenge to us is to strike the right balance in a given country context—and sometimes it is a difficult task indeed."

USDA's Arthur Dommen agrees that many countries may have failed to provide adequate incentives to their own farmers to increase food production. "Inappropriate agricultural pricing and marketing policies have led to the decline of the agricultural sector as a whole, including both food crop and export crop production," he says. "The reaction of farmers has been to cut output to cover only their subsistence needs or to withdraw from official markets."

Aware of the domino effect these problems are having on their economies, some African governments are beginning to pave the road for needed structural change. The overwhelming problem is lack of finances.

"As many African countries recognize the need for long-range agricultural reforms, they are faced by the irony that, after two decades of economic decline, they are desperately short of the money or credit for actions needed to make policy changes effective," says Dommen. Although prices for some of their basic commodities have recently improved, problems of meeting debt-payment obligations continue. "The recent strength of the dollar on foreign exchange markets has greatly increased the cost of debt service for most of these countries," says Dommen.

In order to assist these countries in resolving their dilemma, the United States and other aid providers are working with their governments to develop programs to help achieve policy reforms. In testimony before the Senate Foreign Relations Committee earlier this year, AID's Frank Donatelli outlined the major program goals for agricultural development as these: increased investments that will lead to higher production; further development and introduction of appropriate, higher yielding technology; further development of a supportive infrastructure; more trained manpower; and greater opportunity for private sector initiatives, among others.

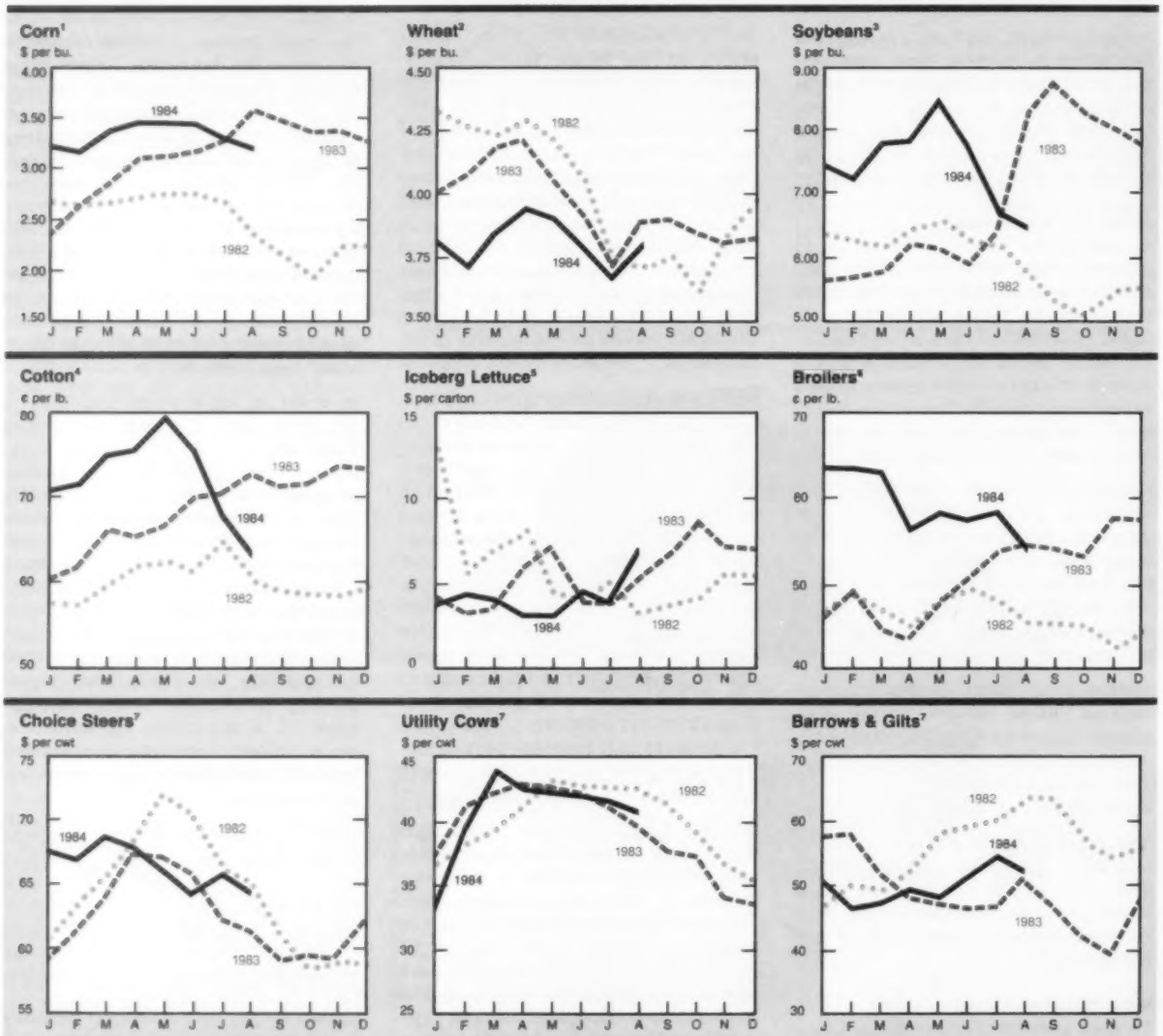
Evidence that some nations are striving to meet these goals and that some more affluent nations are willing to help is encouraging, says USDA's Dommen, but much more needs to be done to set Africa back on the road to economic growth and reduced food dependency. □

[*Based largely on information provided by economist Arthur Dommen of the International Economics Division, Economic Research Service.*]

FARMLINE TRENDS

Monthly Price Monitor

USDA's August index of farm prices was unchanged from July but was 3.6% above the year-earlier level. Wholesale market prices were down for seven of the nine products shown below. Corn prices dropped to the lowest point since February, but wheat prices returned to $3.80 per bushel. Soybeans dropped below $6.50 for the first time since July 1983. Iceberg lettuce jumped more than $3 per carton. Among meat animals, both broiler and choice steer prices sagged to the lowest levels so far this year. Utility cows slipped below $41 per cwt, and barrows and gilts dropped to $52.48.

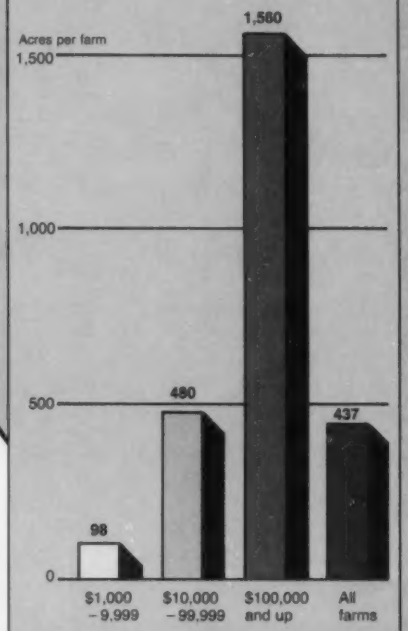


[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1-1/16" spot market price. [5]Standard carton 24's, California-Arizona. [6]Wholesale, New York. Monthly average prices since May 1983 may not be strictly comparable with prices for previous months. [7]Omaha.

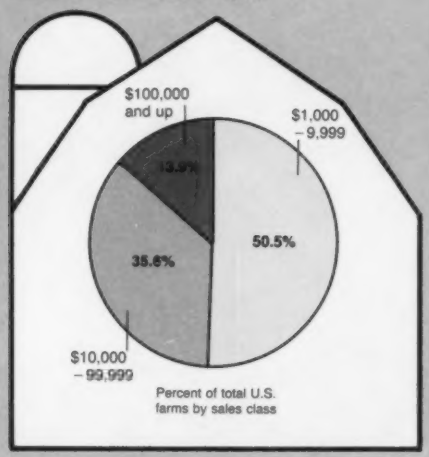
Updating the Farm Count

U.S. farms continue to decline in number and grow in size. The 1984 count is estimated at 2.33 million farms, down about 38,000 from last year's tally and nearly 100,000 fewer farms than in 1980. Since the 1935 peak in farm numbers, the count has dropped every single year except 1980 and 1981. Half our farms ring up annual sales of less than $10,000, but they control only 11% of all land in farms. Farms with gross sales of $100,000 and up represent less than 14% of all farms but account for nearly 50% of the land. Average farm size of these $100,000+ farms is 1,560 acres, compared with the overall U.S. average of 437 acres per farm. The U.S. average is up 5 acres per farm from 1983 and up 10 acres since 1980—evidence that farms are still getting bigger. Texas claims the most farms of any state, followed by Missouri and Iowa. Yet each of these top three states, along with 27 others, has fewer farms this year than they did back in 1980. In raw numbers, North Carolina recorded the largest decline, losing about 14,000 farms between 1980 and 1984. Some other states, such as Oklahoma, Oregon, and Florida, show a net increase in farm numbers since 1980. All figures on the accompanying charts are for June 1, 1984.

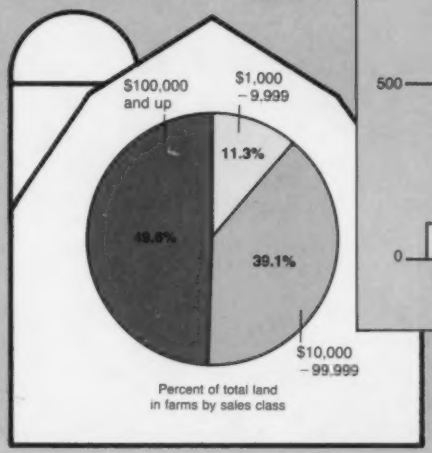
Average Size of Farms



Half of All U.S. Farms Ring Up Annual Sales of Less Than $10,000



. . . But the $100,000+ Operations Claim Half of All Land in Farms



Three Out of Every Five States Report a Net Decline in Farm Numbers Since 1980

Number of farms by state, 1984:

United States
Department of Agriculture

Washington, D.C.
20250

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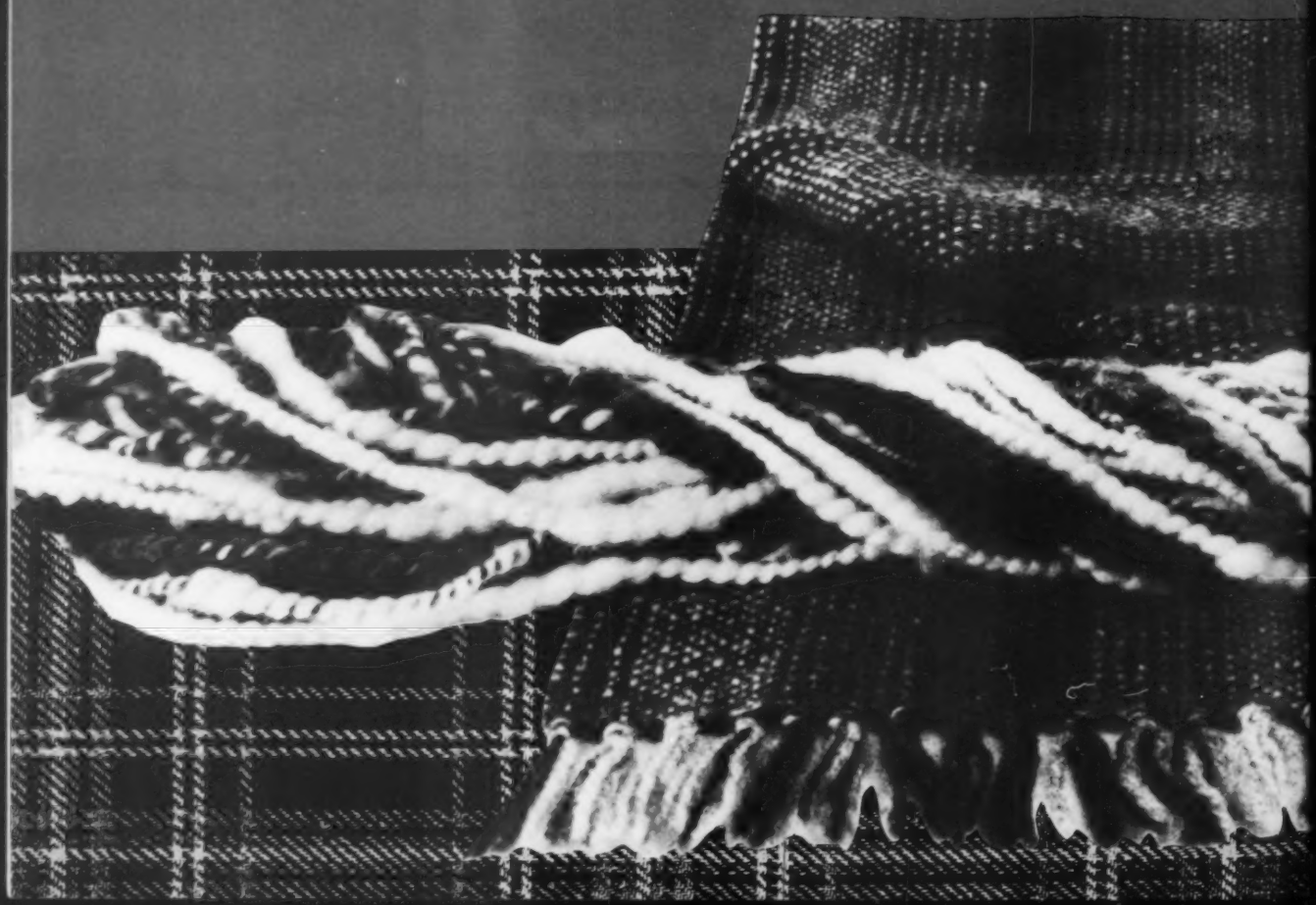
Third Class Bulk